

Independent claim 1 recites, *inter alia*, "the step of processing a peripheral portion of a crude honeycomb structure is made by a cutter having linear cut-off device, the cutter is a bead saw."

As discussed in the January 9, 2007 Amendment, a band saw is a power saw for woodworking, consisting of a toothed metal band coupled to and driven around two wheels. *See The American Heritage College Dictionary* (Third Edition). Thus, a band saw is characterized by a metal band with teeth.

On the other hand, a bead saw includes a wire and a plurality of bead-shaped members fixed on the wire at a certain pitch. See the specification at, for example, Fig. 1A and page 9, line 19 - page 10, line 7. Thus, a bead saw is characterized by bead members fixed on a wire at a certain pitch.

The Office Action asserts that Deming's band saw renders obvious the bead saw recited in the claim. This assertion is inaccurate.

The bead saw has at least two advantages over a band saw. First, a bead saw can conduct the processing of a crude honeycomb structure without causing the breakage of the crude honeycomb structure. Second, a bead saw can conduct a series of operations in one continuous operation. Support for the advantages can be found in the specification at, for example, page 11, line 25 - page 12, line 8 and page 13, lines 6-9. Deming does not recognize the advantages of a bead saw for a honeycomb structure.

Furthermore, the rotating abrasive means 12 of Deming is rotated by spindle means 11, which fixes the abrasive means 12 by means of chuck at only one of the ends of the means 12. The maximum rotating speed is 5000 rpm (see col. 4, lines 27-29 of Deming). As such, the degree in the running out of the top of the rotating abrasive means 12 from the ideal locus would become larger, in accordance with the increase in the length of the rotating abrasive means 12. In fact, only honeycomb structures having a relatively small height were used in

the examples of Deming. That is, if one uses the apparatus disclosed by Deming for the processing of a honeycomb structure having a large size like the ones used in Examples 1-5 of the present application, he or she could not carry out the precise peripheral processing of the structure due to the mechanical trouble mentioned above.

In view of the above, a bead saw and a band saw are different devices having different features. Thus, Deming's band saw does not disclose or suggest the step of processing a peripheral portion of a crude honeycomb structure that is made by a cutter having linear cut-off device, the cutter is a bead saw.

Greven, Barss, Schwend and Johnson do not disclose or suggest a step of processing a peripheral portion of a crude honeycomb structure that is made by a cutter having a linear cut-off device, where the cutter is a bead saw. Accordingly, the applied references, alone or in any combination, fail to teach or suggest the subject matter recited in independent claim 1.

For at least these reasons, independent claim 1 and the claims dependent therefrom, are patentable over the applied references. Withdrawal of the rejections of the claims is respectfully requested.

## **II. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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